



Chapter 3

METHODOLOGY

Primary responsibility for the development of Illinois' SCIP rested with the ITTF Communications Committee and, secondarily, with the SIEC. Together, these committees represent all state and local public safety agencies and mutual aid organizations, every community in Illinois, private sector interests, and non-governmental agencies. While the ITTF was delegated to develop the plan, the SIEC provided governance oversight of the process in what proved to be a successful collaboration of the state's two principal interoperability bodies.

Illinois' SCIP is applicable to all public safety agencies, regardless of governmental affiliation. Volunteer agencies - most notably fire departments - populate a substantial number of the rural communities in southern Illinois. These agencies are routinely afforded the same opportunities to receive grant-funded interoperable equipment and training as their government-sponsored counterparts. Representatives from these volunteer agencies participate in intra-disciplinary mutual aid organizations, attend public safety conferences, and make their voices heard in the public safety community to ensure their unique needs are met despite many challenges, including their communities' lack of resources to monetarily support them.

The ongoing rollout of the STARCOM 21 radio network is evidence of Illinois' commitment to its volunteer public safety agencies. The ITTF, for example, offered STARCOM 21 radios at no cost to all police, fire, emergency management, and public health agencies in Illinois. As of early 2008, more than 2,800 of these radios had been distributed to government and non-government agencies in these disciplines, providing each agency with an interoperable network for command and control utilization at major events.

In a similar vein, all fire, police, public health/hospitals, and emergency management agencies in Illinois were offered VHF (Very High Frequency) mobile/portable radios through the State of Illinois to promote communications interoperability. These radios were pre-programmed with all V-TAC (Very High Frequency Tactical Channel) frequencies in addition to the IREACH (Illinois Radio Emergency Assistance Channel) and discipline-specific VHF frequencies to provide interoperable communications capabilities in field tactical applications. The following series of charts illustrates the VHF interoperability mobile radio configurations programmed into these devices.

**BASIC VHF INTEROPERABLE RADIO - DISTRIBUTED BY THE
ILLINOIS EMERGENCY SERVICES MANAGEMENT AGENCY (IESMA)**

CHANNEL	NAME	TX FREQ	RX FREQ	TONE	TONE RX/TX	WB/NB	NOTES
1	IREACH	155.05500	155.05500	CS	CS	WB	Requires Local License
2	V-CALL	155.75250	155.75250	156.7	TX/RX	NB	
3	V-TAC-1	151.13750	151.13750	156.7	TX/RX	NB	
4	V-TAC-2	154.45250	154.45250	156.7	TX/RX	NB	
5	V-TAC-3	158.73750	158.73750	156.7	TX/RX	NB	
6	V-TAC-4	159.47250	159.47250	156.7	TX/RX	NB	
7	BLANK						
8	BLANK						
9	BLANK						

**FIRE VHF INTEROPERABLE RADIO –
DISTRIBUTED BY THE MUTUAL AID BOX ALARM SYSTEM (MABAS)**

CHANNEL	NAME	TX FREQ	RX FREQ	TONE	TONE RX/TX	WB/NB	NOTES
1	IREACH	155.05500	155.05500	CS	CS	WB	Requires Local License
2	V-CALL	155.75250	155.75250	156.7	TX/RX	NB	
3	V-TAC-1	151.13750	151.13750	156.7	TX/RX	NB	
4	V-TAC-2	154.45250	154.45250	156.7	TX/RX	NB	
5	V-TAC-3	158.73750	158.73750	156.7	TX/RX	NB	
6	V-TAC-4	159.47250	159.47250	156.7	TX/RX	NB	
7	BLANK						
8	BLANK						
9	BLANK						
10	IFERN	154.26500	154.26500	210.7	TX	WB	Blanket MABAS License
11	IFERN2	154.30250	154.30250	67.0	TX/RX	NB	Blanket MABAS License
12	FG-RED	153.83000	153.83000	69.3	TX	WB	Blanket MABAS License
13	FG-WHITE	154.28000	154.28000	74.4	TX	WB	Blanket MABAS License
14	FG-BLUE	154.29500	154.29500	85.4	TX	WB	Blanket MABAS License
15	FG-GOLD	153.83750	153.83750	91.5	TX/RX	NB	Blanket MABAS License
16	FG-BLACK	154.27250	154.27250	94.8	TX/RX	NB	Blanket MABAS License
17	FG-GRAY	154.28750	154.28750	136.5	TX/RX	NB	Blanket MABAS License
18	BLANK						
19	BLANK						

**POLICE VHF INTEROPERABLE RADIOS –
DISTRIBUTED BY THE ILLINOIS LAW ENFORCEMENT ALARM SYSTEM**

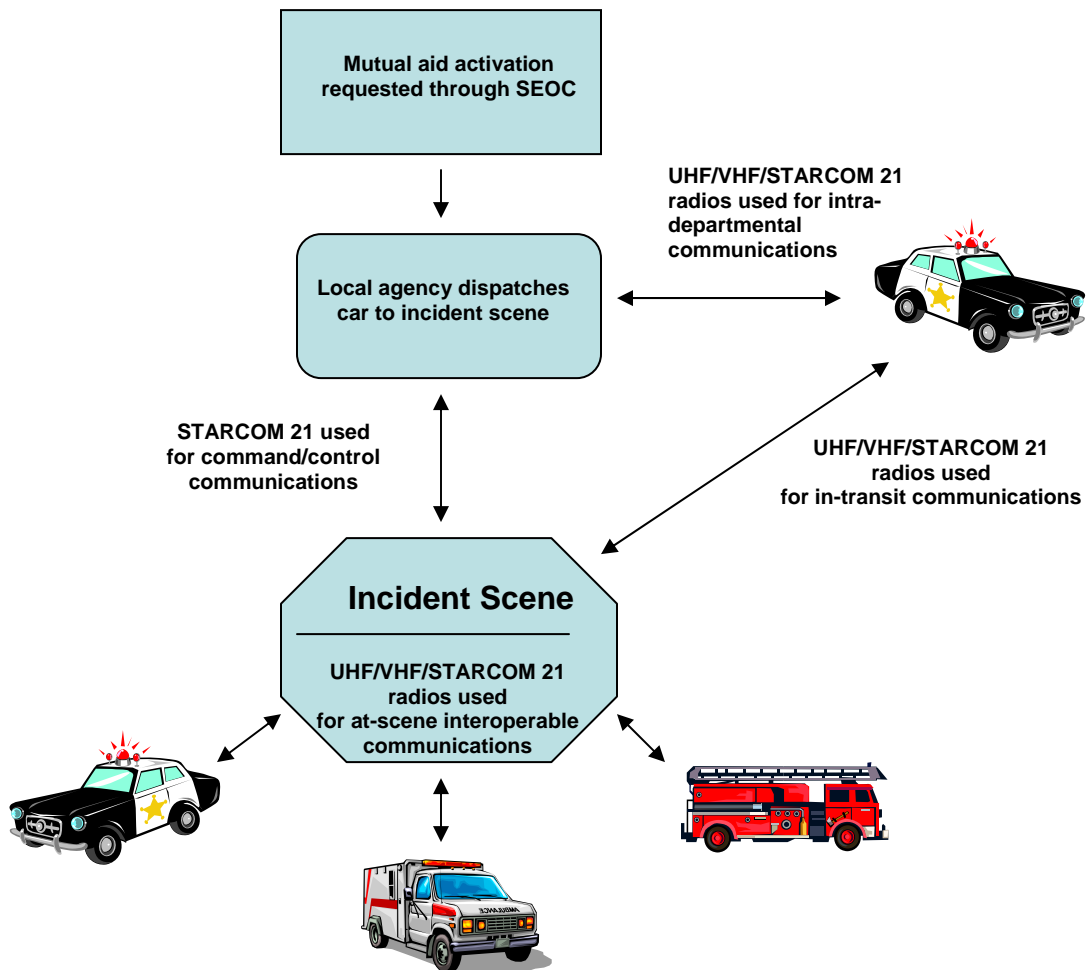
CHANNEL	NAME	TX FREQ	RX FREQ	TONE	TONE RX/TX	WB/NB	NOTES
1	IREACH	155.05500	155.05500	CS	CS	WB	Requires Local License
2	V-CALL	155.75250	155.75250	156.7	TX/RX	NB	
3	V-TAC-1	151.13750	151.13750	156.7	TX/RX	NB	
4	V-TAC-2	154.45250	154.45250	156.7	TX/RX	NB	
5	V-TAC-3	158.73750	158.73750	156.7	TX/RX	NB	
6	V-TAC-4	159.47250	159.47250	156.7	TX/RX	NB	
7	BLANK						
8	BLANK						
9	BLANK						
10	ISPERN	155.47500	155.47500	CS	TX/RX	WB	Blanket ISP License

Recipients of radios may add local frequencies into their radios based on the following options:

- Option 1 – If the radio allows zones, then Zone “A” should be left for the interoperable frequencies above. Additional frequencies may be added in any higher zone, i.e., Zones B, C, D, etc.
- Option 2 – If the radio does not allow zones, local frequencies may be added from Channel 20 and higher.

The State of Illinois, using federal homeland security grant monies, purchased 1,950 mobile radios, 180 portable radios, and 201 base stations which were distributed to local public health agencies, hospitals, local emergency management agencies, and law enforcement and fire departments in 2005 and 2006. Recipients of those VHF radios could exercise the option to add their local frequencies to the units, promoting the use of and familiarity with the instruments within the user communities through day-to-day use.

Illinois’ legacy radio systems are a critical, active component of the state’s interoperability platform as evidenced by their featured inclusion in the standard operating procedure governing usage (see Section 4.5). While STARCOM 21 is viewed as the next generation of interoperability, it can, when necessary, create a bridge to merge legacy radios on some frequencies. The still-limited distribution of the STARCOM 21 radios precludes their use as the primary interoperability network for all users at this time. Simply stated, STARCOM 21 is used as a command and control resource for all inbound units assigned to a disaster or mutual aid response. On-scene interoperable communications are handled primarily through the legacy VHF, UHF (Ultra High Frequency), and 800 MHz radios and systems as well as some STARCOM 21 talk groups as illustrated on the following page.



The availability of monies through the Public Safety Interoperable Communications (PSIC) grant program will allow Illinois agencies to acquire additional STARCOM 21 radios or install gateways to access Illinois' 700/800 MHz interoperability platform, expanding the use of this breakthrough technology while decreasing the state's dependence on its legacy interoperable communications systems.

STARCOM 21 is truly a statewide communications network with operational talk groups for first responders that provide local, regional, and statewide coverage. Until such time as the use of STARCOM 21 radios becomes commonplace, Illinois' public safety agencies will continue to use legacy VHF, UHF, and 800 MHz radios and systems for interoperable communications on a daily basis.

As with the development of the SCIP, both the ITTF Communications Committee and the SIEC share responsibility for sustaining the viability of the plan. Members of both committees serve as informational conduits by actively soliciting input from their constituencies. Under the managerial auspices of IEMA, the plan is reviewed annually, and modifications to its strategies and time lines are made to keep its programmatic objectives on target for completion prior to the established deadlines. Illinois' Interoperability Coordinator spearheads the annual review.